MEDICOLEGAL ASPECTS OF INTRAPARTUM MONITORING: A SHORT SERIES

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> *"Proper management of labor, delivery, and the puerperium is one of the most important tasks of the obstetrician-gynecologist. As in antenatal care, the goal of intrapartum care is maximal safety for mother and infant in a style that facilitates a positive beginning to the parent/child relationship. Most women will do relatively well during pregnancy, labor, and delivery, and a minimum of medical intervention is necessary to meet these goals. Some, however, will require substantial intervention to achieve a safe and comfortable delivery. Deciding who needs and who does not need the various interventions available to the obstetrician is a continuing challenge, faced a new with each labor and patient."* (Iams, 1990)

This short series on medicolegal aspects of intrapartum monitoring highlights the issue of whether a poor outcome of a low-risk pregnancy can be blamed on poor intrapartum monitoring. The series opens with a brief overview of the problem and highlights certain factors which complicate the issue. In the second article, some aspects of monitoring itself will be reviewed as well as selected data frequently offered as evidence of defective monitoring. The series will conclude with a clinical case discussion. Readers are encouraged to write to us about their personal experiences relevant to issues raised in the series and to offer viewpoints which may be helpful to other practitioners. A follow-up article will be published summarizing opinions of substance.

It is not uncommon in the experience of obstetricians or family practitioners to be accused of medical malpractice on the presumption that a defective baby indicates bad obstetrical care. This is especially true if no obvious cause can be found for the defect such as a known congenital disorder or a genetic abnormality. The presumption becomes even more powerful when the pregnancy was considered to be of low risk (careful history taking, prenatal evaluation and assessment revealed no medical condition in the mother or fetus that would predispose either to morbidity or mortality). But the presumption becomes almost a certainty when a bad outcome is associated with errors and omissions in the care of the obstetrical patient whether those errors or omissions are causally related to the unfortunate outcome.

The allegation that a bad outcome of a low risk pregnancy must have resulted from negligent intrapartum monitoring has been attributed to greedy lawyers or to parents who, say health care staff, want to place blame for their defective child on someone other than themselves. Although there are greedy lawyers and parents who project blame, there is also negligent intrapartum monitoring. Notwithstanding, bad outcomes are more frequently associated with deliveries that objective reviewers would describe as competently monitored or in which no reasonable relationship can be found between a defective child and substandard intrapartum monitoring. Unfortunately, federal judges who hear military malpractice cases have little difficulty rendering a judgment against the United States when confronted with a severely mentally retarded or neurologically handicapped child and any evidence suggesting a breach of the standard of care. The judges, as well as the parents and society at large, are well aware that the majority of women who become pregnant deliver normal children. Furthermore, judges do not deal with cases where normal children are born in spite of "evidence" of intrapartum distress or hypoxia. It almost seems, in cases such as these, that the burden is on the health care system to prove that a bad outcome is not the result of negligent intrapartum monitoring.

The situation is further complicated by the fact that technology has led to the expectation that even high risk pregnancies will have a good outcome. Intrapartum monitoring with electrical apparatus for example, gives an illusion to the layman (and sometimes to the professional) that intrapartum difficulties affecting the well-being of the fetus are easily detectable and able to be remedied. The majority of patients (and judges) usually do not appreciate the complexities involved in the interpretation of electronic fetal monitoring data. Nor do they understand the technical issues involved with use of the equipment, including its attendant risks to fetus and mother. When these issues are raised at trial, they may appear self-serving.

Moreover, experts themselves may argue over what was or should have been done in a particular case, with the most articulate expert prevailing. The plaintiff's expert usually alleges that the intrapartum monitoring was substandard or that electronic fetal monitoring should have been done when it was not. The latter argument still carries weight in spite of recent practice guidelines and research studies which indicate that electronic fetal monitoring holds no essential advantage over what is called "clinical monitoring."

Adding to the problem is the fact that many current textbooks of obstetrics and gynecology, midwifery, obstetrical nursing practice (see references) often convey the impression that electronic intrapartum monitoring and detection of fetal problems are more cut and dried than they actually are. Even with practice guidelines and textbooks, the practice of obstetrics requires extensive use of medical judgment.

One of the leading causes of litigation in OB is based on the allegation that a neurologically handicapped child suffered perinatal asphyxia because of negligent intrapartum care (Ramin and Gilstrap, 1990). With the presumption that bad outcome reflects bad care, it is argued (by patient, plaintiff, lawyer, court, peer reviewer) that the neurological injury resulted from intrapartum hypoxia and acidosis in the fetus, a circumstance which could have been prevented had the attendant health care staff provided proper intrapartum monitoring. Proper monitoring would have detected "fetal distress" and allowed for timely intervention.

It is variously alleged that monitoring was not done, was inadequate, was incompetent, or clearly revealed indications of fetal distress which were negligently overlooked or interpreted by the health care staff.

What are the known facts concerning adverse neurological outcome as a complication of labor and delivery? The major neurological complications include cerebral palsy (CP), severe mental retardation, and seizure disorder. There have been unsubstantiated allegations that mild personality disorders, learning disabilities, and mild mental retardation have resulted from inadequate intrapartum monitoring and hypoxia. Interestingly, severely depressed newborns (low Apgar scores) often evidence no subsequent detectable neurological or intellectual damage.

No more than 15% of cases of severe mental retardation can be attributed to perinatal events, negligent or not (American College of Legal Medicine Foundation, 1991). Although CP may be accompanied by mental retardation and a seizure disorder, there is currently no evidence that either mental retardation or epilepsy alone is caused by perinatal hypoxia.

In 1985, an NIH task force on causes of mental retardation and cerebral palsy concluded that the main causes of severe mental retardation were genetic, biochemical, viral and developmental—not birth trauma. Cerebral palsy is associated with prematurity, intrauterine growth retardation, and occasionally perinatal hypoxia. But at least fifty percent of all CP infants revealed no indication of depression at birth or problems in pregnancy or labor.

The fact is that the only neurologic deficit clearly linked to perinatal asphyxia is CP. Even so, the association of CP with hypoxia is weak as "most hypoxic newborns do not develop CP and most children with CP did not have documented perinatal hypoxia" (American College of Legal Medicine, 1991). There is no factor in labor or delivery that is a major predict or of CP. The American College of Legal Medicine Foundation states that "despite improvements in obstetrics and neonatal care, there has been no consistent decrease in the frequency of CP in the past two decades."

Most severe neurological defects occur in high risk pregnancies and result from factors mentioned earlier in addition to a multiplicity of other factors that are considered to be etiologic. Nevertheless, alleged defective monitoring continues to be one of the most common causes for litigation following delivery of a brain damaged infant. (Other causes include: failure to timely perform a cesarean section; unavailability of the obstetrician;

and improper use of oxytocin. A few additional cases involve inadequate newborn resuscitation, improper application of anesthesia, inappropriate evaluation of antepartum ultrasound, and inadequate genetic counseling (American College of Legal Medicine, 1991)).

A perfect legal system would find that health care practitioners who conduct intrapartum monitoring according to generally accepted guidelines, who apply reasonable judgment to the ambiguities of a particular patient's circumstances, and who take appropriate action when indicated should not be held liable for bad outcomes. Nevertheless, in an imperfect legal system, liability is frequently found.

What can the staff caring for intrapartum patients do to minimize the chances that a bad outcome will be received as evidence of bad care, particularly substandard intrapartum monitoring? The schooled answer is: be knowledgeable of the most recent generally accepted guidelines for intrapartum monitoring; diligently attend to the patient in labor; be knowledgeable and experienced in using whatever method of accepted monitoring is selected; know the causes of problems that arise in low risk pregnancies, indications of those problems, and management techniques; establish, implement, review, and keep current protocols for intrapartum monitoring; document the relevant events and parameters of monitoring including identified problems and what was done to alleviate them; perform a quality assurance peer review of cases in which bad outcomes occurred; insure that those entrusted with intrapartum monitoring are knowledgeable and experienced in the use of equipment employed; maintain equipment in good operating condition; thoroughly identify electronic fetal monitoring strips, if used, and insure their retrievability; insure that enough staff is available to conduct intrapartum monitoring; be friendly and polite and supportive of the patient in labor.

Following these principles, health care providers should be able to offer the obstetrical patient the best chance of avoiding a bad outcome. In addition, they can offer themselves the best chance of avoiding adverse litigation.

None of the principles mentioned is mysterious or beyond the reach of an adequately trained and experienced health care staff. Nevertheless, bad outcomes still result from negligent intrapartum monitoring, or can be successfully argued to equal bad care because health care staff do not always follow generally agreed upon practices. Rationalizations such as: there was not enough staff on duty to handle a deluge of patients; or, the electronic fetal monitor wasn't working properly; or, "The last time I awoke the doctor for this finding he accused me of being an idiot" will not be sympathetically heard by a court although peer reviewers might be more understanding. If intrapartum monitoring has as its goal the avoidance of preventable bad outcomes, then intrapartum monitoring is something worth doing and doing well.

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